FERC Technical Conference

Promoting Regional Transmission Planning and Expansion to Facilitate Fuel Diversity including Expanded Uses of Coal-Fired Resources

Docket No. AD05-3-000

May 13, 2005 – Charleston, West Virginia

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Introduction: I am a management consultant that specializes in coal project development, building on my recent experience as Principal of RDI's Coal Consulting Practice (1993-1999) and five years as President of Great Northern's coal and power project development ventures centered in the Upper Great Plains (1999-2004). More recently, my clients have included the Wyoming Infrastructure Authority where until recently, I have served as its Interim Executive Director. As such, my perspectives on the transmission challenges of coal project development are based on hands-on experience.

I have organized my comments to respond to the questions posed to this panel regarding the coal project development industry's views on regional transmission planning. The personal comments that I will provide today do not necessarily reflect the views of any particular developer, project, or segment of the industry.

- 1. The role of regional planning in coal project development
 - a. Regional planning is an essential component of coal project development required to secure the necessary public and stakeholder support for a project, particularly when transmission expansions are required. However, regional planning must be coupled with a definitive approval and decision-making process in order for a coal project and its transmission requirements to proceed a process which is lacking in regions not governed by RTOs, such as the West.
 - b. Coal project development generally consists of two following major components: the coal plant and associated transmission. Separate, but linked, approval and decision-making processes are required for each component. In order for transmission to proceed, a clear cost recovery mechanism for transmission investments must be defined a mechanism that is lacking in most regions of the country.
- 2. The role of the OATT open access process in coal project development.
 - a. The OATT process is well suited to distributing and administering the incremental capacity that remains in a given transmission system, although there are considerable differences between different transmission providers. However, the OATT process is unsuited for aggregating load and expanding transmission capacity to serve coal projects and is largely seen as a deterrent to coal project development.
 - b. Alternate methods outside of the OATT process need to be developed to facilitate transmission expansions. Options include DOE's proposed NIETB process and the third-party financing concept from the draft Energy Bill. Successful Western precedents along these lines include the Path 15 public-private partnership (involving WAPA and Trans-Elect) and the proposed Frontier Line from Wyoming to California.

- 3. The role of clean coal in existing coal-fired plants and new coal-fired plants
 - a. Make no mistake any new coal project is <u>required</u> to use clean-coal technology, including the repowering of existing coal-fired plants.
 - b. Two primary commercial alternatives exist: advanced pulverized coal (PC) and circulating fluidized bed (CFB) technologies. Both offer state-of-the-art emission profiles and efficiencies using proven, commercial technologies.
 - c. IGCC has not yet been commercialized, but is being considered for a handful of installations in regulated states, if the local PUCs can be convinced to pass on the risk and higher costs to rate-payers. This has not yet occurred examples: Wisconsin and Arizona.

4. The trade-off of mine-mouth vs. near-load coal projects

- a. <u>Mine-mouth</u> projects offer low fuel costs largely insulated from market risk and price volatility and also provide economic stimulus to thinly-populated regions where coal is generally found provided that transmission can be arranged. Most mine-mouth projects are at "Greenfield" sites. Examples abound in the West and Midwest including Peabody, Great Northern, Black Hills, NAPG, and Sithe/Dinè.
- b. <u>Near-load</u> projects trade the elimination of transmission uncertainties for greater exposure to coal market and rail transportation risk provided that the air shed will allow generation additions. Most near-load projects are at "Brownfield" sites linked with retrofits of older coal plants. Western examples include Xcel-Comanche and TriState-Springerville.
- c. While the economics of mine-mouth generation tend to be substantially more favorable than near-load generation, transmission uncertainties and the difficulties in expanding the transmission grid tend to force the higher cost option of near-load coal-fired generation on rate-payers.

5. What can be done?

- a. Formalized process for generation and transmission planning in non-RTO regions
- b. State transmission authorities to fill the void for transmission development
- c. Alternates to the OATT process: third-party financing along the lines of Path 15
- d. Consistent OATT procedures between transmission providers
- e. Back-stop FERC siting authority for multi-state transmission projects
- f. Elimination of jurisdictional issues between public and private entities
- g. New transmission products to more fully utilize existing capacity
- h. Coal/wind: coal provides transmission that would not otherwise be available to wind
- i. Regional standards for cost recovery so that financing can proceed
- j. Provide incentives for independent entities to develop transmission

Final Thought: Transportation is required to transport our nation's vast and cost-effective energy resources from remote regions (where they are generally located) to domestic customers located in population centers. The hurdles of transporting natural gas, oil, and coal have been largely overcome, as the siting and construction of pipelines and railroads is a relatively uncomplicated project-driven process. However, the most cost-effective energy transportation mode of all, transmission, has not been expanded due to the void left in regional transmission planning resulting from mid-1990s utility deregulation. Consequently, I would encourage FERC and state utility commissions to stay the course in their efforts to facilitate regional transmission planning and transmission policy reform.